NORLITE, LLC

628 SO. SARATOGA STREET
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March 27, 2014

Ms. Nancy Baker
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014 RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng
Air Compliance Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866 RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedances Report
Kiln 1: 02/20/14 – 03/26/14
Kiln 2: 02/20/14 – 03/26/14

Dear Sir/Madam:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite, LLC (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 02/20/14 thru 03/26/14. The attached document explains each of the "malfunctions" for Kilns One and Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the stack gas flow monitor. The stack gas cutoffs were attributed to water droplets from the Mist Pad contacting the stack gas probe, water vapor in the stack condensing from the extreme cold and wind and contacting the stack gas probe, or a hairline crack which has formed on the heat probe of the stack gas flow unit. For two of the causes, the water contacting the probe caused it to fault. The hairline crack caused the heat probe of the unit to read inaccurate which translated into faulty flow rates. Attempts were made to adjust the ID fan speed to combat the water droplet movement without significant success. Norlite has been working with the Department to approve the Optical Flow Sensor Technology for measuring flow rate in the kiln system. Norlite submitted a proposal to the Department on December 24, 2013 requesting approval to make the Optical Flow Sensor the certified technology for measuring stack gas flow on Kiln 1. On January 20, 2014, the Department granted Norlite permission to submit a permit modification which once approved would make the Optical Flow Sensor the certified technology on Kiln 1. Norlite has completed the final programming to calculate the velocity into standard cubic feet per minute and submitted a permit modification request to the Department on March 25, 2014. With the permit modification request, Norlite submitted modified permit pages, the results of a RATA test, and 1 month of comparison data. Please see below for a history of the work completed thus far.

Norlite has been working to resolve stack gas span cutoffs in general for almost two years. Norlite has been working with the DEC to install a new optical flow technology to monitor stack gas flow rate. A test unit has been installed on Kiln 1 and tested to obtain additional information to be used in future calculations. Norlite conducted an official RATA test on the optical flow sensor in Kiln 1 on November 26, 2013 which yielded very good results. The final RATA Testing report has been received by Norlite and submitted along with a proposal for implementing official use of the unit to the DEC on December 24,

2013. Norlite prepared and submitted a permit modification request to the Department on March 25, 2014. The permit modification request was to modify the current Part 373 and Title V permits to address the addition of the optical flow sensor as the unit to monitor stack gas flow rate. Along with the permit modification request, Norlite submitted comparison data, modified permit pages, and additional technical information about the technology. After final approval is given for the unit on Kiln 1, Norlite will install a unit on Kiln 2 with an expedited schedule for completion which will hopefully see the unit in certified operation by the end of April or mid-May 2014. An extra challenge exists with the installation of the optical flow sensor on Kiln 2 in that access to where the unit will be located is very limited. Norlite will need to install a platform so facility personnel can easily and safely access the unit for routine preventative maintenance. Norlite does not expect the installation of the platform to delay the installation of the optical flow sensor on Kiln 2.

Norlite has been working with the DEC to improve LGF delivery and handling at the kilns to address these types of cutoffs. In April 2013, the DEC conditionally approved Norlite's plan to remove the minimum LGF Line Pressure requirement, allow a positive displacement pump to be used for fuel flow control, and allow the use of a recirculation line for use during times when off LGF. The DEC also requested a six month study be conducted without a minimum LGF Line Pressure requirement. The study was started on May 01, 2103 and completed on October 31, 2013. Norlite conducted an extensive search for a positive displacement pump which would allow variable speed control, have tight pump tolerance, and have suitable reliability for long term use. The results of the six month study which summarized over 4 million lines of operational data between the two kilns was submitted to the DEC on December 5, 2013. Based from the results of the six month study, Norlite feels the data supports the removal of the minimum LGF Line Pressure requirement. Norlite has concluded that a positive displacement pump which meets all the needed criteria does not exist. As stated previously, Norlite has acquired the assistance of a process engineering firm to assist in the search for a suitable positive displacement pump and conduct an overall review of the entire kiln feed system to provide a proposal for improving the kiln fuel feed system. The process engineering firm has been supplied with facility drawings, had several discussions with Norlite personnel, and taken a facility tour to better understand the facility operations as they relate to fuel delivery at the kilns. Norlite submitted a proposal provided by SPEC Engineering to the DEC on December 31, 2013 for review and approval. The proposal was to use an automated control loop to control pressures and fuel flow rates at the kilns. On January 13, 2014, the DEC approved the overall concept of the proposal with the requirement that additional engineering specifications be provided by certain dates for ultimate approval of the entire project.

Norlite and SPEC Engineering have completed an extensive hydrology study of the entire LGF Fuel delivery system to ensure that proper velocities can be maintained throughout the piping system to prevent material buildup and keep the LGF homogeneously mixed. Norlite and SPEC Engineering have also meet with the Department or spoke with the Department on the phone several time to go over the hydrology study as well as keep the Department up to date on the overall progress of the project. Norlite and SPEC Engineering are spending extra time on the engineering design of the overall kiln fuel delivery system to help minimize as many problems as possible when installation occurs. Norlite and SPEC are committed to ensuring the kiln fuel delivery system operates as expected with as few troubleshooting issues as possible, for this to occur, extra engineering is needed during the design phase. Norlite has setup another meeting with the Department in early April to go over the piping layout and other engineering design pieces, which will be presented in 3-D to help fully visualize the overall layout.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tom.vanvranken@tradebe.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken
Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments
James Lansing, NYSDEC – CO w/attachments
Joseph Hadersbeck, NYSDEC – R4w/attachments
Jim Quinn, NYSDEC – R4 w/attachments
Tita LaGrimas – Tradebe

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
02/20/14 - 03/26/14

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/21/2014	14:49:41	2/21/2014	14:51:49	0:02:08	39	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/21/2014	14:59:05	2/21/2014	15:00:12	0:01:07	40	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/21/2014	15:32:56	2/21/2014	15:58:11	0:25:15	41	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/22/2014	17:04:56	2/22/2014	17:05:15	0:00:19	42	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/22/2014	17:06:22	2/22/2014	17:25:32	0:19:10	43	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/23/2014	13:20:47	2/23/2014	14:30:26	1:09:39	44	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/24/2014	0:32:41	2/24/2014	1:10:46	0:38:05	45	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/24/2014	1:32:23	2/24/2014	3:18:59	1:46:36	46	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe / Rinsed Mist Pad	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/24/2014	9:01:36	2/24/2014	9:03:13	0:01:37	47	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/24/2014	17:23:50	2/24/2014	17:24:56	0:01:06	48	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/24/2014	20:50:16	2/24/2014	21:34:29	0:44:13	49	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to a Dirty Stack Gas Probe	Stack Gas Flow Rate	Span	I & E Cleaned the Probe
2/24/2014	21:56:16	2/24/2014	23:19:05	1:22:49	50	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe / Rinsed Mist Pad	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
02/20/14 - 03/26/14

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/25/2014	10:44:13	2/25/2014	10:44:52	0:00:39	51	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	0:26:02	2/26/2014	0:26:55	0:00:53	52	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	9:50:50	2/26/2014	9:51:37	0:00:47	53	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay		Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
2/26/2014	11:05:37	2/26/2014	11:06:29	0:00:52	54	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate		The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	12:47:25	2/26/2014	13:01:36	0:14:11	55	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate		The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	20:20:03	2/26/2014	20:24:28	0:04:25	56	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate		The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	4:34:05	2/27/2014	4:35:09	0:01:04	57	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	4:47:08	2/27/2014	4:47:50	0:00:42	58	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	5:40:14	2/27/2014	5:40:46	0:00:32	59	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	7:04:36	2/27/2014	7:05:00	0:00:24	60	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	7:12:06	2/27/2014	7:12:38	0:00:32	61	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

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MACT EXCEEDANCE REPORT - KILN 1
02/20/14 - 03/26/14

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/27/2014	7:16:21	2/27/2014	7:16:46	0:00:25	62	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	7:19:55	2/27/2014	10:46:03	3:26:08	63	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	10:58:47	2/27/2014	10:59:12	0:00:25	64	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	11:01:48	2/27/2014	11:02:14	0:00:26	65	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	11:02:25	2/27/2014	12:34:45	1:32:20	66	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	12:44:26	2/27/2014	12:44:59	0:00:33	67	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	12:46:05	2/27/2014	12:46:26	0:00:21	68	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	12:51:58	2/27/2014	12:52:56	0:00:58	69	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	13:49:38	2/27/2014	13:56:28	0:06:50	70	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	14:14:39	2/27/2014	14:18:01	0:03:22	71	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	17:53:24	2/27/2014	17:54:10	0:00:46	72	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	18:24:14	2/27/2014	18:24:37	0:00:23	73	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

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MACT EXCEEDANCE REPORT - KILN 1
02/20/14 - 03/26/14

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/27/2014	19:46:39	2/27/2014	19:47:20	0:00:41	74	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	19:55:01	2/27/2014	19:55:51	0:00:50	75	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	19:55:57	2/27/2014	19:56:32	0:00:35	76	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	20:00:57	2/27/2014	20:01:34	0:00:37	77	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	20:02:09	2/27/2014	20:02:42	0:00:33	78	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	20:15:30	2/27/2014	20:16:14	0:00:44	79	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	20:25:42	2/27/2014	23:12:27	2:46:45	80	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
2/27/2014	23:27:54	2/27/2014	23:28:58	0:01:04	81	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	23:29:04	2/27/2014	23:29:50	0:00:46	82	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
2/27/2014	23:29:05	2/27/2014	23:29:50	0:00:45	83	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	23:33:21	2/27/2014	23:34:04	0:00:43	84	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
02/20/14 - 03/26/14

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/27/2014	23:37:14	2/27/2014	23:37:49	0:00:35	85	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	23:44:51	2/27/2014	23:45:47	0:00:56	86	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	23:47:22	2/27/2014	23:48:09	0:00:47	87	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	7:16:07	2/28/2014	7:17:19	0:01:12	88	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	14:33:03	2/28/2014	14:33:26	0:00:23	89	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	14:33:31	2/28/2014	14:35:05	0:01:34	90	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
2/28/2014	15:06:13	2/28/2014	15:46:09	0:39:56	91	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	15:59:26	2/28/2014	15:59:51	0:00:25	92	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	16:12:53	2/28/2014	16:14:04	0:01:11	93	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	16:34:11	2/28/2014	16:35:11	0:01:00	94	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	16:50:41	2/28/2014	16:51:30	0:00:49	95	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

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MACT EXCEEDANCE REPORT - KILN 1
02/20/14 - 03/26/14

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/28/2014	17:02:14	2/28/2014	17:30:16	0:28:02	96	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	19:42:46	2/28/2014	19:43:15	0:00:29	97	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	20:04:08	2/28/2014	20:04:40	0:00:32	98	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	22:24:43	2/28/2014	22:25:05	0:00:22	99	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	22:39:16	2/28/2014	22:39:49	0:00:33	100	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/28/2014	22:56:48	2/28/2014	23:52:55	0:56:07	101	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/1/2014	0:18:51	3/1/2014	0:19:12	0:00:21	102	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/1/2014	0:22:16	3/1/2014	0:56:36	0:34:20	103	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/1/2014	1:14:59	3/1/2014	1:15:43	0:00:44	104	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/1/2014	1:20:11	3/1/2014	1:30:43	0:10:32	105	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/1/2014	2:55:50	3/1/2014	2:56:19	0:00:29	106	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair

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3/1/2014	7:05:17	3/1/2014	7:05:38	0:00:21	107	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/1/2014	7:22:17	3/1/2014	7:22:40	0:00:23	108	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/1/2014	8:23:34	3/1/2014	8:24:10	0:00:36	109	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/1/2014	11:21:36	3/1/2014	11:22:06	0:00:30	110	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/1/2014	14:42:45	3/1/2014	14:43:10	0:00:25	111	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/3/2014	4:00:58	3/3/2014	4:01:42	0:00:44	112	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	4:03:37	3/3/2014	4:04:12	0:00:35	113	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	5:02:31	3/3/2014	5:03:46	0:01:15	114	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	5:16:14	3/3/2014	5:17:49	0:01:35	115	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair

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3/3/2014	5:22:30	3/3/2014	5:35:14	0:12:44	116	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	10:24:43	3/3/2014	10:25:04	0:00:21	117	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	18:00:48	3/3/2014	18:01:09	0:00:21	118	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
3/3/2014	18:47:19	3/3/2014	18:48:38	0:01:19	119	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	19:32:46	3/3/2014	19:33:05	0:00:19	120	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	20:04:13	3/3/2014	20:06:50	0:02:37	121	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	22:24:47	3/3/2014	22:29:44	0:04:57	122	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/3/2014	22:46:02	3/3/2014	23:16:50	0:30:48	123	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/4/2014	5:42:02	3/4/2014	5:43:11	0:01:09	124	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair

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3/4/2014	6:41:11	3/4/2014	6:41:33	0:00:22	125	Malfunction	Strong Winds Out of the South Caused the Water Vapor in the Stack to Condense and Contact the Stack Gas Probe Causing the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/4/2014	7:53:01	3/4/2014	8:01:17	0:08:16	126	Malfunction	The Operators Were Controlling Fuel Flow Using Valves Which Caused a Fuel Surge to Occur and Trigger the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
3/4/2014	16:53:55	3/4/2014	16:54:32	0:00:37	127	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/6/2014	8:49:50	3/6/2014	8:50:20	0:00:30	128	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The Kiln Was Shutdown On 3/12/14 for Scrubber Inspection and Repair
3/8/2014	1:17:17	3/8/2014	1:17:41	0:00:24	129	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements

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2/21/2014	2:03:39	2/21/2014	2:04:19	0:00:40	127	Malfunction	The Operators Were Controlling Fuel Flow Using Valves Which Caused a Fuel Surge to Occur, Affecting the Rear Chamber Pressure System	Back Chamber Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
2/24/2014	18:25:41	2/24/2014	19:58:47	1:33:06	128	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/24/2014	20:08:32	2/24/2014	20:30:33	0:22:01	129	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	0:39:53	2/26/2014	0:40:29	0:00:36	130	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	1:16:22	2/26/2014	1:24:16	0:07:54	131	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	2:14:21	2/26/2014	2:20:48	0:06:27	132	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	2:26:16	2/26/2014	2:34:50	0:08:34	133	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	8:26:42	2/26/2014	8:27:09	0:00:27	134	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	9:23:44	2/26/2014	9:24:06	0:00:22	135	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	10:30:57	2/26/2014	10:31:33	0:00:36	136	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	10:48:47	2/26/2014	10:49:10	0:00:23	137	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

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2/26/2014	11:26:49	2/26/2014	11:27:08	0:00:19	138	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	13:08:09	2/26/2014	13:08:34	0:00:25	139	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	13:12:42	2/26/2014	13:13:23	0:00:41	140	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	13:20:01	2/26/2014	13:20:29	0:00:28	141	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	13:24:07	2/26/2014	14:00:15	0:36:08	142	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to the Stack Gas Probe Being Dirty	Stack Gas Flow Rate	Span	I & E Cleaned the Stack Gas Probe
2/26/2014	14:04:02	2/26/2014	16:57:15	2:53:13	143	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe / Rinsed Mist Pad	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe / The Mist Pad Was Rinsed
2/26/2014	17:35:48	2/26/2014	17:37:02	0:01:14	144	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	17:39:47	2/26/2014	17:45:22	0:05:35	145	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	17:51:33	2/26/2014	17:52:26	0:00:53	146	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	17:52:53	2/26/2014	18:08:23	0:15:30	147	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/26/2014	18:26:01	2/26/2014	20:50:15	2:24:14	148	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe / No Shale Feed	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
2/27/2014	20:47:44	2/27/2014	22:02:55	1:15:11	149	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

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3/1/2014	7:56:25	3/1/2014	7:56:57	0:00:32	150	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/1/2014	15:05:51	3/1/2014	15:06:34	0:00:43	151	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/1/2014	15:24:49	3/1/2014	15:25:38	0:00:49	152	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/1/2014	15:28:23	3/1/2014	15:28:47	0:00:24	153	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/1/2014	15:29:40	3/1/2014	15:30:19	0:00:39	154	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/1/2014	15:35:50	3/1/2014	15:43:58	0:08:08	155	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/1/2014	15:49:54	3/1/2014	15:50:45	0:00:51	156	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/3/2014	6:02:32	3/3/2014	6:10:03	0:07:31	157	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels

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3/3/2014	22:20:38	3/3/2014	22:24:30	0:03:52	158	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/4/2014	4:14:09	3/4/2014	4:55:37	0:41:28	159	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/4/2014	5:37:42	3/4/2014	5:38:19	0:00:37	160	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Chamber Differential Pressure System	Back Chamber Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
3/4/2014	5:54:20	3/4/2014	5:54:46	0:00:26	161	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/4/2014	6:24:36	3/4/2014	6:25:06	0:00:30	162	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/4/2014	20:47:29	3/4/2014	21:55:45	1:08:16	163	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/4/2014	21:58:12	3/4/2014	23:04:57	1:06:45	164	Malfunction	After Extensive Troubleshooting and Adjustments Made to the Kiln System, It Was Determined a Small Crack Had Formed On One of the Probe of the Stack Gas Unit. This Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Stack Gas Probe Was Replaced on the Early Morning of 3/5/14 Which Returned the Flow Rate Back to Normal Operation Levels
3/5/2014	20:18:16	3/5/2014	23:39:58	3:21:42	165	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	I & E Cleaned the Probe
3/6/2014	21:12:05	3/6/2014	23:06:48	1:54:43	166	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe

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3/7/2014	21:21:10	3/7/2014	22:11:50	0:50:40	167	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/15/2014	16:04:26	3/15/2014	16:06:37	0:02:11	168	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Chamber Differential Pressure System	Back Chamber Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
3/16/2014	15:12:53	3/16/2014	17:07:48	1:54:55	169	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe / Rinsed Mist Pad	Stack Gas Flow Rate		The ID Fan Speed Was Decreased to Help Prevent Water Droplets From Hitting the Probe
3/22/2014	16:20:20	3/22/2014	16:21:45	0:01:25	170	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Chamber Differential Pressure System	Back Chamber Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
3/25/2014	0:27:23	3/25/2014	0:28:33	0:01:10	171	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Chamber Differential Pressure System	Back Chamber Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements